

National Climatic Data Center

DATA DOCUMENTATION

FOR

DATASET 6210 (DSI-6210)

Marine Upper Air

December 18, 2003

National Climatic Data Center
151 Patton Ave.
Asheville, NC 28801-5001 USA

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1. Abstract: The upper Air Observations in this digital data file include stations operated by the National Weather Service, U.S. Navy, and certain South American stations whose data received quality control at the National Climatic Data Center (NCDC). Additional Upper Air Observations from the Global Tel-Communications System (GTS), and the U.S. Air Force are also included in this digital file but are not quality controlled by NCDC.

Approximately 100 stations were selected, prime selection factors were marine influence and near sea level heights. The intent was to select data that could be used to supplement ship observations. These data were collected from sources listed below:

- 1) TD-6201 Upper Air Stations 1973 to date.
- 2) NMC upper air stations 1973 to date.
- 3) TD-5600 Marine Area (SHIPS).

The sort is by station, year, month, day, hour for the period 1/73 to 6/88. Additional periods will be added as updates starting with 7/88 from sources 1 and 2 above.

2. Element Names and Definitions:

The first five fields constitute the **ID Portion**, and occur at the beginning of each record. The next ten fields of the record contain the **Data Portion**. The **Data Portion** is repeated for each level in the observation. The maximum number of levels is 200.

ID Portion (32 Characters) Fixed Length

Station ID	Lat	Lat Code	Long	Long Code	Date/Time	Number Values
xxxxxxxx	xxxx	x	xxxxx	x	xxxxxxxxxx	xxx

Data Portion (36 Characters) repeated Number-Values Times

Lvl-Qlty Indicator	Time	Pressure	Height	Temp	RH	Wind Dir	Wind Speed	Quality Flags	Type of Level
x	xxxx	xxxxxx	xxxxxx	xxxx	xxx	xxx	xxx	xxxxxx	x

RH	Wind Dir	Wind Speed	Quality Flags	Type of Level
xxx	xxx	xxx	xxxxxx	x

Tape Field	Tape Record Position	Element Name	Code Definitions and Remarks
001	1-8	Station ID	For U.S. controlled and cooperative stations, the WBAN number. For stations received through GTS, the WMO number. This field may contain alphabetic characters for ships and remote sensed observations. Numeric station numbers are right justified

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			and zero filled, while alphanumeric station identifiers are left justified and blank filled. If unknown, this field contains "99999999". If the station identification is unknown, both latitude and longitude must be present.
002	9-12	Latitude	The station latitude in degrees and minutes. When unknown, this field contains "9999". Latitude will not normally appear for land stations.
003	13	Latitude Code	Code used to indicate the Northern (N) or Southern (S) latitude.
004	14-18	Longitude	the station longitude in degrees and minutes. When unknown, this field contains "99999". Longitude will not normally appear for land stations.
005	19	Longitude Code	Code used to indicate Longitudes East (E) or West (W).
006	20-29	Date-Time	The schedule time of the observation, as defined by WMO. The format of date/time is YYYYMMDDHH, i.e., year, month, day, and hour. This field may never be unknown.
	20-23	Year	This is the Year of record. Range of values are 1946-current year processed.
	24-25	Month	This is the Month of record. Range of values are 01 to 12.
	26-27	Day	This is the Day of record. Range of values are 01 to 31.
	28-29	Hour	This is the Hour of record. Range of values are 00 to 23. Hour is GMT. Normal scheduled observation times are 00 and 12 GMT. For selected periods and area observations may have been taken at other times, especially 06 and 18 GMT.
007	30-32	Number-Repeat-Groups	This number represents the number of data levels found in the current observation, including edited levels. Range of values are 001-200. Two hundred is the maximum number of levels.
008	33	Level-Quality-Indicator	Denotes the results of any quality controls applied to this level. Range is as follows: 0 = Original values are correct 1 = Original values missing 2 = Original values doubtful, a corrected level follows. 3 = Original values doubtful, uncorrected. 4 = Original values in error, a corrected level follows 5 = original values in error, uncorrected 6 = Corrected level 9 = Level not checked A-Z = Indicators supplied by NMC.
009	34-37	Time-Since-Release	The elapsed time since the release of the sounding in minutes and tenths. If the elapsed time is not known, this field

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			contains "9999". Range is 0001 through 9999. Available only for U.S. quality controlled stations beginning Jan 1981.
010	38-42	Pressure-At-Level	Atmospheric pressure at the current level in Kilopascals and hundredths. If unknown, this field contains "99999".
011	43-48	Height-At-Level	Geopotential height of the current level in whole meters. If unknown, this field contains "-99999". Range of values are -99999 through 99999.
012	49-52	Temperature At Level	the free air temperature at the current level in degrees and tenths Celsius. If unknown, this field contains "-999". Range of values -999 through 999.
013	53-55	Relative-Humidity At Level	The relative humidity at the current level is whole percent. If unknown, this field contains "999".
014	56-58	Wind-Direction At-Level	Direction of wind at the current level in whole degrees (nearest five degrees for observations received through GTS). If unknown, this field contains "999"
015	59-61	Wind-Speed-At-Level	Speed of the wind in whole meters per second. If unknown, this field contains "999".
016	62-67	Quality-Flags	This field contains the results of any quality control procedures, identifying each individual element found in error (see table below). Quality Control Flag 0 = Element is correct 1 = Element is doubtful 2 = Element is in error 3 = Replacement value 4 = Assumed or estimated value 9 = Element not checked A-Z Indicators supplied by NMC.
	62	Time-QF	Time Quality Flag
	63	Pressure-QF	Pressure quality flag
	64	Height-QF	Height quality flag
	65	Temperature-QF	Temperature quality flag
	66	Relative-Humidity-QF	Relative Humidity quality flag
	67	Wind-QF	Wind quality flag
017	68	Type-Of-Level	0 = Surface 1 = mandatory 2 = Significant 3 = Generated 4 = Tropopause 5 = Maximum wind 9 = Other/unspecified

3. **Start Date:** 19730101

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4. **Stop Date:** 19930630

5. **Coverage:**

- a. Southernmost Latitude: -90.0S
- b. Northernmost Latitude: 90.0N
- c. Westernmost Longitude: -180.0W
- d. Easternmost Longitude: 180.0E

6. **How to Order Data:**

Ask NCDC's Climate Services about the cost of obtaining this data set.
Phone: 828-271-4800
FAX: 828-271-4876
E-mail: NCDC.Orders@noaa.gov

7. **Archiving Data Center:**

Archive Branch
National Climatic Data Center
151 Patton Avenue
Asheville, NC 28801

8. **Technical Contact:**

National Climatic Data Center
151 Patton Avenue
Asheville, NC 28801

9. **Known Uncorrected Problems:** None.

10. **Quality Statement:**

U.S. data processed by the NCDC are subjected to extensive quality control procedures. Suspect data are returned to a verifier for manual correction. GTS data are subjected to various degrees of automated quality control by the receiving agency. NCDC accepts the data as correct during the reformatting procedure. Therefore, the user must be prepared to perform his own quality checks on GTS data. (The primary function of NMC and AFGWC is to produce forecasts, not to provide an archive data base.)

11. **Essential Companion Datasets:**

12. **References:**

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